

ABSTRACT

An apparatus such as a wireless telephone is disclosed, the apparatus having a screen with an icon, and an input device for controlling the icon on the screen. The input device includes a sensor adapted to detect movement and a captive disc movably suspended over the sensor, the captive disc having an active surface facing the sensor and the sensor viewing a portion of the active surface. When the captive disc is moved, the sensor detects differing portions of the active surface and determines movement by changes in its view.

Because the captive disc is substantially flat, the input device can be relatively small in size compared to input devices of the current art. The smaller size requirement is advantageous for implementing the input device in various devices including the PDAS, wireless communication devices, and other electronic equipment.